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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
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EXAMINER			

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KIM K	PAPER NUMBER
ART UNIT	

2782

DATE MAILED: 02/13/98

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☒ Responsive to communication(s) filed on 6/16/97
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 3-18 and 20-27 is/are pending in the application.
- ☐ Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 3-13, 15-18 and 21-27 is/are rejected.
- ☒ Claim(s) 14 and 20 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 457
- ☐ Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

—SEE OFFICE ACTION ON THE FOLLOWING PAGES—

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1
DETAILED ACTION

1. This Office Action is responsive to the Preliminary Amendments C and D filed April 15, 1997 and June 16, 1997, respectively. As requested by the Amendment (C), claims 2 and 19 (See claim numbering objection below) have been canceled, and claim 27 is added. Thus, claims 3-18 and 20-27 are currently pending in the application.

6
Claim Objections

2. The numbering of claims is not accordance with 37 CFR 1.126. The original numbering of the claims must be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. *When claims are added*, except when presented in accordance with 37 CFR 1.121(b), *they must be renumbered consecutively beginning with the number next following the highest numbered claims* previously presented (whether entered or not).

11
16 The misnumbering dates back to the Preliminary Amendment B filed June 7, 1996 in which claim number 9 was skipped when an attempt was made to add claims 2-27. Consequently, the claims 2-27 were renumbered as 2-26 at the time that amendment was entered. Since the subsequent amendment also had the misnumbering, same renumbering was done before the amendments to the claims were entered. If Applicant disagrees with the renumbering, it should be brought to the attention of the Examiner, along with proper numbering claims.

Misnumbered claims 10-28 have been renumbered as 9-27.

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Information Disclosure Statement

An effort was made to consider all of the references cited by the Applicant in paper numbers 4 and 7. Although all of references were previously cited or submitted in the parent case, the parent case could not be obtained in light of the case being processed for publication. Examiner thanks the applicant for substantially complying to Examiner's request for assistance in providing all but a few of the references. All references that were available to the Examiner at the time of this action has been considered as indicated in the PTO-1449 forms. Examiner will consider and provide, in a supplemental action, initialed PTO-1449 form for the missing references as they become available (See PTO-1449, part of paper number 7, publications without Examiner's initials on second page).

Allowable Subject Matter

3. Claims 14 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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1 (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6 5. Claims 3, 4, 7, 9, 10-12 and 23, 24, 26 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by **Ahuja** et al., US Patent 5,689,553.

As to claims 3, 4, 7, 23, 24 and 27, Ahuja discloses a teleconferencing system for conducting a teleconference among a plurality of participants (See Col. 1, lines 11-24), comprising:

11 a workstation associated with each of at least three participants, each workstation having at least one origination and at least one reproduction capability, each selected from the group consisting of audio, video and data origination/reproduction capabilities (Fig. 1, #s 18, 30, 36, 46, 60 and 68, Col. 4, lines 7-14);

16 a first network providing a data path for carrying digital data signals among the workstations (Fig. 1, #10);

a data conference manager for managing a real-time data conference during which shared data is displayed on the workstation monitors of a plurality of the participants (Fig. 2, #112, Fig. 5 and Col. 9, line 62 - Col. 10, line 33);

21 an AV path for carrying AV signals, representing video images and spoken audio of the participants (Fig. 12, #s 190 and 216, 196 and 220, and Col. 2, lines 33-34);

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1 a plurality of AV reproduction devices each having capabilities for reproducing audio or video signals at a workstation and configured to address a request for audio and/or video reproduction services generated at one of the workstations (See Fig.1, the phone and the monitors);

an AV conference manager for managing the real-time reproduction of the video images
6 and audio of one participant at the workstation of another participant (Fig. 2, #s 114 and 116, Col. 1, lines 6-9, Col. 6, lines 38-43 and US Patent 5,471,318 (which is incorporated by reference), Video and Audio Managers, Col. 4, lines 29-39);

a directory of each AV reproduction device and its associated capabilities; the AV conference manager and directory being configured to interact to address a request for an AV
11 reproduction services, generated at a workstation, to cause an appropriate AV reproduction device to provide the requested reproduction service to the workstation. (Fig. 6 and 12, #230 "USER PROFILE"), wherein a service directory tracks the capabilities associated with each workstation, whereby a call, from a second to a first participant, and including a request for a service with respect to the first participant, is processed based on which capabilities are associated
16 with the first participant, such as audio reproduction only or data only conferencing for the participant lacking other capabilities (Col. 2, lines 47-51, Col. 2, line 56-Col. 3, line 8 and Col. 14, lines 3-28).

As to claims 9 and 26, Ahuja further discloses a signal format converter configured to convert signals of one format to another format, whereby the teleconferencing system can support

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1 originating and reproduction devices based on different signal format standards (The hybrid
bridges, Col. 6, line 60 - Col. 7, line 2 and Col. 8, line 48 - Col. 10, line 33).

As to claims 10-12, Ahuja further discloses routing AV signals through a gateway to a
remote network (Col. 5, line 59 - Col. 6, line 29 and Fig. 12, #186 and Col. 14, lines 37-42),
gateways typically do not decompress data being routed (see also Fig. 12, #s 190 and 194 for
6 compressing and decompressing of the AV data).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness
rejections set forth in this Office action:

11 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the
manner in which the invention was made.

16 7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahuja in view of
Burke et al., US Patent 4,451,705.

Ahuja teaches the invention substantially as claimed, and as explained above in rejection of
claim 27.

Ahuja does not teach the participant locator.

21 Burke teaches a teleconferencing system in which a callee/participant is located by locating
the workstation at which the participant is logged on, and routing the call to the workstation (See
Abstract, Fig. 5, #508, also see claim 1).

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1 It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the participant locator feature taught by Burke in the system taught by Ahuja in order to accommodate free movement of participants from a workstation to another workstation (See Burke, Col. 1, lines 23-30).

8. Claims 5, 8, 13, 15, 22 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable
6 over Ahuja in view of Ahuja et al., "Networking Requirements of the Rapport Multimedia Conferencing System", INFOCOM '88, IEEE, 1988, pp 746-751 (**Rapport**).

As to claims 5, 8 and 25, Ahuja teaches the invention substantially as claimed, and as explained above in rejection of claim 7.

Ahuja, while teaching the handling of the calls to the extent of the different levels of media
11 capabilities of the participant, does not teach the possibility of the unconnectibility to the network, i.e., calling from a telephone.

Rapport teaches a multimedia conferencing system in which a participant can join a conference by calling from a telephone in which case, the participant can communicate with the voice (page 748, right column, lines 13-25).

16 It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the calling in from a telephone feature taught by Rapport the system taught by Ahuja in order to allow a participation by only the use of a telephone (See Rapport, page 748, right column, lines 16-17).

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1 As to claims 13, 15 and 22, Ahuja teaches the invention substantially as claimed, and as explained above in rejection of claim 7.

Ahuja does not explicitly teach the video mosaic generator or the n-1 audio summer.

Rapport further teaches mosaic generator (Fig. 5b, page 750, left column, lines 12-14), and the n-1 audio summer (Fig. 3 and page 749, left column lines 3-44, for example, A in C1
6 receives voices of B and C only).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the video mosaic and audio summing features taught by Rapport in the system taught by Ahuja in order to allow participants to hear and see all other participants. (See Rapport, page 749, left column, lines 3-16 and page 750, left column, lines 16-17).

11 9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahuja in view of Rapport as applied to claim 15 above, and further in view of Wilder et al., US Patent 5,260,941.

Ahuja in view of Rapport teaches the invention substantially as claimed, and as explained above in rejection of claim 15.

Ahuja in view of Rapport does not explicitly teach the summing of audio signal to a
16 portion of already summed audio signal.

Wilder et al teaches a telephone conferencing system in which an audio signal of a third participant is summed to a summed audio signals of a first and a second participant (See Abstract, lines 21-26, Col. 19, lines 23 -63 and Claim 15).

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1 It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the summing technique as taught by Wilder et al in the system taught by Ahuja in view of Rapport in order to accommodate large number of participants with less required circuities (See Wilder, Col. 20, lines 23-34).

10. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ahuja in
6 view of McFarland et al, US Patent 5,408,526 (cited by the Applicant).

Ahuja teaches the invention substantially as claimed, and as explained above in rejection of claim 12.

Ahuja does not teach the router selecting the optimal routing path based on the state of paths.

11 McFarland et al teaches telephone Conferencing system in which router selects, from available paths, the most cost effective path based on the state of the paths (See Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the path selection feature as taught by McFarland et al in the system taught by Ahuja as a means of saving costs of the conference (See McFarland, Col. 1, lines 29-58).

16 11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ahuja in view of Rapport as applied to claim 13 above, and further in view of Watabe et al, "Distributed Desktop Conferencing System with Multiuser Multimedia Interface", IEEE Journal on Selected Areas in Communications, Vol. 9, No. 4, May 1991, pages 531-539 (**MERMAID**).

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1 Ahuja in view of Rapport teaches the invention substantially as claimed, and as explained
above in rejection of claim 13.

Ahuja in view of Rapport does not explicitly teach selecting of the full display of a
participant to replaced the video mosaic image.

6 MERMAID teaches the selecting of the full display of a participant to replaced the video
mosaic image (page 535, Fig. 8 and left column, line 51 - right column, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was
made to incorporate the participant display selection feature taught by MERMAID into the
system taught by Ahuja in view of Rapport in order to provide the flexibility of being able to
choose the display.

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Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent:	Issued:	Inventor:	Filed:
4,931,872	Jun 90	Stoddard et al.	Nov 86
5,303,343	Apr 94	Ohya et al.	Sep 90

Ensor et al., "The Rapport Multimedia Conferencing System - A software Overview", Computer Workstation Conference. IEEE, 1988, pages 52-58.

Ahuja et al., "Coordination and Control of Multimedia Conferencing", IEEE Communications Magazine, Vol. 30, Issue 5, 1992, pages 38-43.

Horn et al., "An ISDN Multimedia Conference Bridge", TENCON '90 - 1990 IEEE Region 10 Conference on Computer and Communication, 1990, pages 853-856.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ki Kim whose telephone number is (703) 305-3872, and whose E-mail Address is ki.kim@uspto.gov. The examiner can be normally be reached Monday through Friday from 7:00 AM to 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Thomas C. Lee, can be reached at (703) 305-9717.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

Any response to this action should be mailed to:

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(703) 308-9051, (for formal communications intended for entry)

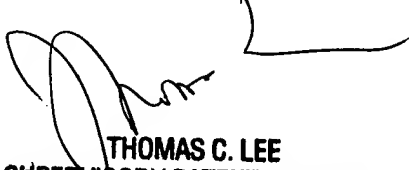
Or:

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1 (703)308-5359, (for informal or draft communications, please label "PROPOSED"
or "DRAFT")

6 Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

11
Ki Kim
January 30, 1998


THOMAS C. LEE
SUPERVISORY PATENT EXAMINER
GROUP 2700